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MICHIGAN PRIMER

OF AGRICULTURE.

AND STATE JOURNAL

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MADE WITH SUCH CERTAINTY AND IN SUCH QUANTITY AS TO PAY.

And there has not been a single failure—not a single trial when the same results have not been obtained.

PRACTICAL FARM DRAINAGE.

We are in receipt of a little work with the above title, just published by J. J. Willingale, of Indianapolis, Ind. It contains a great deal of information in regard to the subject of drainage, where it is necessary and how it should be done to give the best results. Among the benefits to be derived the author, C. G. Elliot, mentions a few of the most observable, namely, the prevention of the failure of crops on account of excessive moisture; the improved condition of the soil, fitting it to receive the seed at an earlier period; the less labor of working well drained land; the prevention of "heaving" in the soil from the presence of too much water during the winter, and also protection against freezing out. These advantages are of course known to every farmer who has done any under-draining. As to the kinds of land that require drainage we may mention sloughs and ponds, of which our State contains a great number; flat land that is under cultivation, and liable to be cold and wet in early spring, and baked and cracked during the summer months. Of this last description the flat clay lands that extend north from Detroit through a portion of Macomb and into St. Clair County, are a fair sample. They are strong lands, with capacity for growing excellent crops of grain or grass, but they require under-draining to make them reliable in case of a late spring or a hard winter. Those who were vainly struggling last spring to get their corn to start on these lands will appreciate the truth of what we say.

OUR FRENCH LETTER.

Fertilizer from Blood—Preserving Diseased Potatoes—Cultivation of Hops.

Paris, Oct. 30, 1882.

FERTILIZER FROM BLOOD.

Coagulated blood is an excellent manure, but its usage is limited; the blood of the slaughter house is rich in nitrogen and mineral matters, but as it decomposes rapidly, it is a dangerous and inconvenient fertilizer. A discovery recently made, enables the coagulating matter to be transformed into a solid, inodorous fertilizer. Fresh blood contains 88.20 of organic matter, and 0.80 of saline substances; the rest being water; dried, it is reduced to one-fourth of its original weight; in this state it contains 12 to 18 per cent of azote and 1 1/2 to 2 per cent of phosphoric acid. Now sulphate of ammonia contains 20 per cent of nitrogen. The total number of animals annually slaughtered in France for food, is 48,000,000, of which number, 2,500,000 are oxen and bulls; 7,000,000 cows; 1,500,000 calves; 26,000,000 sheep, and the remainder pigs, etc. The total of the blood of these animals amounts to 70,000 tons, value at 300 fr. the ton. The total value of guano imported into France during the best years, was 50,000 tons, at an average price of 350 fr. per ton. In South America, where in some places upwards of 1,000 animals are slaughtered daily, there is a grand future for applying the new discovery, and which consists in keeping the blood, when quitting the animal, constantly stirred with a stick to prevent the formation of clot, after which persulphate of iron is added; a kind of paste is then formed, very elastic, and which dries and forms cakes, to be ultimately pulverized. The product is inodorous, and contains from 10 to 15 per cent of azote. In the country districts, an ox yields about four gallons of blood, valued at 12 sous, and can manure 120 square yards.

PRESERVING DISEASED POTATOES.

M. Bouilliez, a name apropos for his process, has adopted the following plan for preserving diseased potatoes; he erects immense boilers in the fields even, cooks the tubers, and places them in trenches or silos, hermetically sealed with wash, cork and store the potatoes, represents an outlay of nine fr. per ton. The cattle eat this preserve voraciously. Indeed it is becoming general now to store all root crops in silos, instead of in cellars; in the latter case, if destined for the market, there is a loss for the seller, if for consumption, for the owner, because potatoes etc. exposed even to the uniform temperature of a cellar, slowly ferment and lose their nitrogenous matters. Professor Muntz has demonstrated, that all alimentary products undergo a sensible loss of their protein substances when exposed to the air, but that no loss whatsoever takes place, if the air is perfectly excluded. Distillery etc. grains are at present in great demand for silo preservation, and mix well with forage or roots similarly preserved.

NEW IMPLEMENT.

A very useful implement has appeared; it is a bill-hook, serving at the same time for a hammer.

CULTIVATION OF HOPS.

The cultivation of hops is on the increase, the consequence of deficient vintages; farm schools are henceforth to experiment in this new culture, as in Germany.

Ranche Farming.

As the traveler approaches the Rocky Mountains from either side he finds that the words farms and farming have become obsolete among the inhabitants, and that rancho and ranching, from the Spanish rancho, have taken their place. In the valleys among the mountains they are necessarily limited in extent, and nearly all the tillable lands are confined to narrow strips, bordering some rivulet or larger stream coming down from the peaks. These streams are fed by the melting snows in summer; and although the water is generally exceedingly cold, it answers very well for irrigating the hot, black soils of the valleys, as rains can not be depended upon to supply the requisite amount of moisture necessary for producing any kind of farm or garden crop. In some of the valleys excellent wheat can be grown, but the most common and profitable crops are oats, millet or hay, potatoes, nearly all kinds of garden vegetables, with the exception of those requiring a long season and great heat. Everywhere in the mountains and valleys the nights are cool; consequently there are few localities where any except the earliest varieties of corn succeed, or tomatoes and melons will ripen; but peas, beets, carrots, and all the varieties of cabbage and cauliflowers, grow to a large size, and are of excellent quality. All of the cabbage tribe of plants appear to find a most congenial soil and climate in the valleys of the Rocky Mountains.

Waste by Washing.

We do not sufficiently estimate the loss to our farms by washing. The richer the soil the greater the amount of the farmer's best capital carried to the sea to aid in forming islands and deltas. And in Iowa our rich, loamy soil is very much inclined to float away in our floods. This is owing to its loose and crumbling nature. Hard rains not only wash away the cream of the farms, but cut deep and hideous ditches and gullies. So long as the prairies of the west were covered by grass, and sod formed almost impervious to water, the rains had but little effect. So soon as the sod is broken and the soil loosened, the attrition by the rapid flowing of the water is taking the best part of the land which the owner imagines he has a good warranty deed for. We know of farms on which, twenty-five years ago, the sod was unbroken along the ravines, the water flowing on the top of the sod, which now have deep, yawning channels, eight feet deep and fifteen wide. And still the washing goes on.

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Atrophy or Marasmus in a Horse.

Veterinary Editor Michigan Farmer:
I have a bay horse ten years old that has been lame in the right fore shoulder or leg for seven weeks. When taken he dragged his leg with his toe on the ground, not seeming able to bring it forward, then in about three hours he laid down and has been down ever since. A swelling appeared on the shoulder blade which disappeared in two days by being bathed in smartweed tea. His appetite is good. He lies still, except for pawing a little and raising his head. Tried to raise him in a sling but it seemed to hurt him and he made no effort to stand. He is in fair order when first taken but is now a mere skeleton. Any instruction will be received with thanks.
B. J.

SUGAR FROM SORGHUM.

President Colman, of the Cane-Growers' Association of the Mississippi Valley, has recently returned from a visit to Champaign, Ill., where the process of making sugar from sorghum is being carried on. He is very enthusiastic over the results so far obtained, and predicts the day is not far off when the northern and western States will furnish all the sugar needed for home consumption. He said that the Champaign institution is now turning out thirty barrels of sugar a day, which sells at eight and one half cents a pound at the works. And all this success has been obtained in the most unfavorable season that we have had for many years. Indeed, so unpropitious was the season that Prof. Weber and Scovell did not expect to make sugar at all, and told the stockholders of the company so. They knew they could make sirup, but the juice fell so much below that of last year in sucrose that they had no expectation of obtaining sugar in paying quantities. The first batch that was made the stockholders were present and wore long faces. It was at night, and there was but little expectation of any sugar being made. The result was awaited with great anxiety. At last the test came, and, to the astonishment of all, out came the crystallized fluid even before cooling. There was then a regular jubilee. Here were new works, costing \$25,000, that had not been erected without considerable difficulty. It was an experiment to settle the question whether sugar could be made in the North as well as in the South in such quantity as to make it pay. The season had been exceedingly unpropitious for the growth of cane. The latitude was Northern Illinois, and the planting was on the level prairie. The spring had been very cold and wet, and seed lay in the ground a month or more without germinating. Seed planted on the 23d of June matured as early as that planted a month or six weeks previous. The rainfall throughout the three summer months in the vicinity of Champaign was eighteen inches, while in usual seasons it has not been half that, and the sorgho crop needs but little rain and revels in drouth. The mean temperature during the same months was six to eight degrees lower than usual, while hot weather is needed to develop the greatest amount of saccharine. And yet, notwithstanding all these unfavorable circumstances, on the very first trial, before the seed was fairly ripe, the company were in possession of several thousand pounds of most excellent sugar, and from that time to this there has not been a single failure in obtaining sugar, at least 40 per cent of the entire amount of sirup crystallizing, and the balance of course making a number one article of molasses, commanding fully the prices of the New Orleans commodity.

AGRICULTURAL.

FALL PLOWING.

An agricultural paper at this time of the year, without an article, either original or copied, on the above subject, would not be considering those topics which the season suggested, and which some writers for farm papers consider it a solemn duty to perform. I could write an article filled with the usual stock of ideas, detailing all the happy results which are generally stated as following the practice, if I believed them, but I don't. The reasons for the practice will not apply to one per cent of the lands of our State, and to the ninety-nine per cent, fall plowing would have no compensating advantage over spring plowing, for the usual crops grown here. The practice is advocated for analogy, on the supposition that what is good for one soil or one situation, must be equally beneficial for all alike. Because they till corn in New England, and cut ditches and run open furrows through their wheat fields in New York and Ohio, that is no reason for our practicing their plans. All our spring crops delight in freshly plowed fields, and there is usually sufficient time before the season for sowing and planting arrives to do the plowing for all the spring crops we desire to grow. The advantage accruing to fall plowed lands from freezing and thawing is very mythical indeed. It certainly helps to settle it into a sodden seed bed, which will continue unless much labor is expended to loosen the soil deeply and thoroughly. The usual cultivation given to spring plowed fields will not suffice to properly prepare fall plowed lands, so that the saving in time argument is not sound.

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STOCK NOTES.

The Fat Stock Show opens at Chicago Thursday, November 16, and continues for one week. A large number of people from Michigan will be in attendance.

S. H. TODD of Wakeman, Ohio, asks the attention of those who want some superior Chester White or Poland China hogs to his stock. He is a thoroughly reliable and very successful breeder.

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It is a long time since we have had a chance to notice the arrival of any good Michigan cattle in Detroit; but on Saturday we had the pleasure of looking over eighteen head that were a credit not only to the party who fed them but to the State. They were brought in by Messrs. Brown & Spencer, the well known drovers, and were fed by Mr. Frank Corwin, on the farm of our old friend, Mr. Samuel Lyndon. They were high-grade Short-horns, three years old, stood short on the leg, had fine level broad backs, good shoulders and very fine bone. To look at they did not appear large, but when weighed they averaged 1,550 pounds, a good weight for three-year-olds. Each one of them brought as much as four scalawag steers, and cost but little more to produce than it would to grow one of them.

MR. C. R. BACKUS, of Williamston, Ingham County, has decided to sell the greater part of his herd of Short-horns, some 18 head in all, on Thursday, November 23d. There are quite a number of these animals young stock that have not yet been bred, and are from the bull Wiley Oxford 34 34111, a bull bred by B. B. Groom, of Winchester, Ky., by Oxford's Geneva 24221, out of Gloster's Wiley by Louan's Mascaton 23228. Oxford's Geneva was by 8th Duke of Geneva (28390), dam 7th Maid of Oxford by 7th Duke of Airdrie (23718). The females at the foundation of the herd were from the herd of the late Henry Warner, of Dexter. The stock are all in breeding condition, perfectly healthy, and will be sold without reserve. The terms of the sale are quite liberal.

Best Absorbent of Ammonia.

A correspondent of the Country Gentleman writes that paper: "The weight of ammonia per cubic foot is about half that of air, hence its great tendency to pass upwards as soon as found in or near the surface of the earth. The best agent to absorb this gas is carbon or charcoal, hence their purifying effect when placed over decaying matter. Fine garden soil, or road dust, is also one of the best articles, as many have no doubt observed, by applying a few shovelfuls to an offensive outhouse. I have seen the effect in the first minute after applying. Carbon having this peculiar absorbent power, without producing any chemical change, it will be seen how important it is that a full supply of it should be in the soil to hold the ammonia. In a fermenting pile of manure there is always more or less ammoniacal gas passing off, and for any one desiring to save this there is nothing better or cheaper than earth from a ditch or bank, or any other convenient pile. A thin layer occasionally spread over the manure will effectually secure the escaping gas. Many have, no doubt, often seen the advice of the use of plaster or sulphate of lime, which fixes the alkaline gas by its displacing the lime and forming sulphate of ammonia. It is strange that this error should be made, and by those who know better. Between lime and sulphuric acid there is a powerful affinity, and it is no easy matter to break this union, especially by a feeble base like ammonia. If the advice was given to mix the ammonia from a sulphate, no quicker mode could be suggested than adding lime to sulphate of ammonia. The lime would soon have the sulphuric acid, and form sulphate of lime, and the ammonia would pass off never to be caught by another portion of sulphate of lime."

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RYE AND OATS FOR SWINE.

The National Live Stock Journal says: "We have noticed with interest the rapid growth of a few sows and their litters of pigs which have had access to some sheep oats and rye which had become wet before threshing and were thrown aside. At first it seemed as if several bushels of good grain had been wasted; but good use has been made of it all. This suggests that we probably often make a mistake in using corn so exclusively as the grain food of our hogs. At present, with our rye it is worth less per bushel than is corn. We feel sure it has no less feeding value. We have known some good farmers who, after pasturing a rye field in the spring, have allowed the grain to ripen, and then turned in a lot of hogs to harvest it. Unlike oats or wheat, rye is comparatively little injured by rains. It will often be found in good condition after lying on the ground for weeks. Rye may profitably form a part of our pig ration more frequently than it does."

STOCK NOTES.

The Fat Stock Show opens at Chicago Thursday, November 16, and continues for one week. A large number of people from Michigan will be in attendance.

S. H. TODD of Wakeman, Ohio, asks the attention of those who want some superior Chester White or Poland China hogs to his stock. He is a thoroughly reliable and very successful breeder.

MR. N. A. CLAPP of Wixom, offers some well bred Berkshires for sale, all from recorded stock. He has bred some of the finest Berkshires that have ever been seen in Michigan. In 1881 he was awarded eight first prizes at two fairs on his stock.

MR. GEORGE W. STUART, of Grand Blanc, has returned from his trip among the sheep-breeders of Vermont and Western New York. He purchased nine ewes and seven ewe lambs from L. P. Clark of Addison, Vermont. The breeding ewes are from one to five years old, and one of them is a full sister to his celebrated stock ram Moses. Mr. Stuart has also secured the use of Mr. Clark's stock ram 119 for use in his flock.

It is a long time since we have had a chance to notice the arrival of any good Michigan cattle in Detroit; but on Saturday we had the pleasure of looking over eighteen head that were a credit not only to the party who fed them but to the State. They were brought in by Messrs. Brown & Spencer, the well known drovers, and were fed by Mr. Frank Corwin, on the farm of our old friend, Mr. Samuel Lyndon. They were high-grade Short-horns, three years old, stood short on the leg, had fine level broad backs, good shoulders and very fine bone. To look at they did not appear large, but when weighed they averaged 1,550 pounds, a good weight for three-year-olds. Each one of them brought as much as four scalawag steers, and cost but little more to produce than it would to grow one of them.

MR. C. R. BACKUS, of Williamston, Ingham County, has decided to sell the greater part of his herd of Short-horns, some 18 head in all, on Thursday, November 23d. There are quite a number of these animals young stock that have not yet been bred, and are from the bull Wiley Oxford 34 34111, a bull bred by B. B. Groom, of Winchester, Ky., by Oxford's Geneva 24221, out of Gloster's Wiley by Louan's Mascaton 23228. Oxford's Geneva was by 8th Duke of Geneva (28390), dam 7th Maid of Oxford by 7th Duke of Airdrie (23718). The females at the foundation of the herd were from the herd of the late Henry Warner, of Dexter. The stock are all in breeding condition, perfectly healthy, and will be sold without reserve. The terms of the sale are quite liberal.

Best Absorbent of Ammonia.

A correspondent of the Country Gentleman writes that paper: "The weight of ammonia per cubic foot is about half that of air, hence its great tendency to pass upwards as soon as found in or near the surface of the earth. The best agent to absorb this gas is carbon or charcoal, hence their purifying effect when placed over decaying matter. Fine garden soil, or road dust, is also one of the best articles, as many have no doubt observed, by applying a few shovelfuls to an offensive outhouse. I have seen the effect in the first minute after applying. Carbon having this peculiar absorbent power, without producing any chemical change, it will be seen how important it is that a full supply of it should be in the soil to hold the ammonia. In a fermenting pile of manure there is always more or less ammoniacal gas passing off, and for any one desiring to save this there is nothing better or cheaper than earth from a ditch or bank, or any other convenient pile. A thin layer occasionally spread over the manure will effectually secure the escaping gas. Many have, no doubt, often seen the advice of the use of plaster or sulphate of lime, which fixes the alkaline gas by its displacing the lime and forming sulphate of ammonia. It is strange that this error should be made, and by those who know better. Between lime and sulphuric acid there is a powerful affinity, and it is no easy matter to break this union, especially by a feeble base like ammonia. If the advice was given to mix the ammonia from a sulphate, no quicker mode could be suggested than adding lime to sulphate of ammonia. The lime would soon have the sulphuric acid, and form sulphate of lime, and the ammonia would pass off never to be caught by another portion of sulphate of lime."

Waste by Washing.

We do not sufficiently estimate the loss to our farms by washing. The richer the soil the greater the amount of the farmer's best capital carried to the sea to aid in forming islands and deltas. And in Iowa our rich, loamy soil is very much inclined to float away in our floods. This is owing to its loose and crumbling nature. Hard rains not only wash away the cream of the farms, but cut deep and hideous ditches and gullies. So long as the prairies of the west were covered by grass, and sod formed almost impervious to water, the rains had but little effect. So soon as the sod is broken and the soil loosened, the attrition by the rapid flowing of the water is taking the best part of the land which the owner imagines he has a good warranty deed for. We know of farms on which, twenty-five years ago, the sod was unbroken along the ravines, the water flowing on the top of the sod, which now have deep, yawning channels, eight feet deep and fifteen wide. And still the washing goes on.

THE CINCINNATI PRIZE CURRENT ESTIMATES

the summer packing of hogs in the west at 3,224,842 hogs, against 4,903,689 for the same period one year since.

AGRICULTURAL.

SUGAR FROM SORGHUM.

President Colman, of the Cane-Growers' Association of the Mississippi Valley, has recently returned from a visit to Champaign, Ill., where the process of making sugar from sorghum is being carried on. He is very enthusiastic over the results so far obtained, and predicts the day is not far off when the northern and western States will furnish all the sugar needed for home consumption. He said that the Champaign institution is now turning out thirty barrels of sugar a day, which sells at eight and one half cents a pound at the works. And all this success has been obtained in the most unfavorable season that we have had for many years. Indeed, so unpropitious was the season that Prof. Weber and Scovell did not expect to make sugar at all, and told the stockholders of the company so. They knew they could make sirup, but the juice fell so much below that of last year in sucrose that they had no expectation of obtaining sugar in paying quantities. The first batch that was made the stockholders were present and wore long faces. It was at night, and there was but little expectation of any sugar being made. The result was awaited with great anxiety. At last the test came, and, to the astonishment of all, out came the crystallized fluid even before cooling. There was then a regular jubilee. Here were new works, costing \$25,000, that had not been erected without considerable difficulty. It was an experiment to settle the question whether sugar could be made in the North as well as in the South in such quantity as to make it pay. The season had been exceedingly unpropitious for the growth of cane. The latitude was Northern Illinois, and the planting was on the level prairie. The spring had been very cold and wet, and seed lay in the ground a month or more without germinating. Seed planted on the 23d of June matured as early as that planted a month or six weeks previous. The rainfall throughout the three summer months in the vicinity of Champaign was eighteen inches, while in usual seasons it has not been half that, and the sorgho crop needs but little rain and revels in drouth. The mean temperature during the same months was six to eight degrees lower than usual, while hot weather is needed to develop the greatest amount of saccharine. And yet, notwithstanding all these unfavorable circumstances, on the very first trial, before the seed was fairly ripe, the company were in possession of several thousand pounds of most excellent sugar, and from that time to this there has not been a single failure in obtaining sugar, at least 40 per cent of the entire amount of sirup crystallizing, and the balance of course making a number one article of molasses, commanding fully the prices of the New Orleans commodity.

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Horticultural.

Horticultural Nomenclature.

C. M. Hovey, one of the leading eastern horticulturists, has the following to say, in the Massachusetts Ploughman, about errors and synonyms in nomenclature, and the manner in which they generally originate: "The best test of the excellence of any fruit is the number of its synonyms, showing that under certain conditions of soil, culture and treatment, they vary slightly in form, size and color, but yet retain their original excellence in so high a degree that they are supposed to be original productions and worthy of extensive cultivation, though already by some rejected as of no great value. Thus we have in that famous old pear—probably never excelled when produced in its original excellence—the Dojenné Blanc, or St. Michael, no less than twenty-five synonyms; one of them belonging to our own country and the others imported, here around Boston and New England and generally called the St. Michael, in New York the Virgalieu, and in Philadelphia the Butter pear. Our most valuable pear, the Bartlett, is only a synonym, its true name being William's Bon Chretien. For more than 25 years it was an unknown pear found growing in Mr. Bartlett's garden in Roxbury, and supposed to be a seedling until the late Robert Manning, in 1838 or 1839, recognized it as an old English pear introduced in 1790; but had, however, become so generally disseminated that it was impossible to restore the original name. In France it is known as the Williams pear.

"So with the most popular if not the best of all foreign grapes, the Black Hamburg, with no less than 36 synonyms; the delicious white Frontignan, with 29 synonyms, and again the Black Tartarian cherry, with 15 synonyms. Most of the older if not the younger pomologists are familiar with the tenacity with which the late A. J. Downing insisted that the Putnam Russet, was entirely distinct from the Roxbury Russet, and that the Paradise of Autumn was only a synonym of Beurre Bosc. The late Dr. Brinkley, of Philadelphia, described what he supposed was a new and fine seedling pear—as it really is, though possessing some faults—under the name of Eschelman, which proved to be the old Hoesa Schenk, cultivated more than 100 years ago by the late Mr. Corse, of Baltimore, under the still older name of Moore's Pound. For many years the Baldwin apple was cultivated in Western New York under the name of Steele's Red Winter, and in England as the Pecker apple.

"It is quite easy to understand how many of these errors have occurred. A tree neglected, perhaps, for a long time, or even when not neglected, from ordinary culture, produces only a crop of fair fruit, though nothing remarkable but its excellence. Some friend or amateur, thinking the fruit of superior quality, procures scions and grafts young and vigorous trees, which receive extra attention, and the fruit is, perhaps, very much larger and more beautiful, than the original; possibly the name may not be known, or if known forgotten; yet the fruit is so good it commands attention, and falling under the notice of some cultivator is pronounced a distinct variety, named probably after the person in whose garden it was found; thus we have Warner's Black Hamburg grape, Frazer's Black Tartarian cherry, Ronald's Black Tartarian and the Putnam Russet apple. All these fall into the hands of nurserymen, who, not perhaps ever having seen the fruit, take the opinion of those who have, and continue the errors. They are not always intentional, but result from the want of a thorough knowledge of the several fruits as well as the trees, but even then sometimes deceiving the most intelligent pomologist."

from France, and are to be found only in the larger cities, where they are sold for an average of six cents each. Mr. Stevens thinks that the keeping qualities of some American apples, and their adaptation for transportation, as well as the fact that they are of better flavor than any now found there, make them admirably adapted for the markets of northern Europe. The journey is longer than to England, but the prospective price is greater.—American Cultivator.

porous. Naturally the thoughtful mind suggests that, on the same principle, dry sand must have similar preservative effect on other fruits, such as pears, plums, nectarines, apples, and other smooth skinned varieties.

HERBERT OSBORN, of the Iowa College Agricultural College, recommends as remedies for the scurvy bark louse and the oyster shell louse, kerosene and soap. The kerosene may be used pure where it can be done with safety but ordinarily it must be diluted with water. This may be accomplished by forming an emulsion of kerosene and milk (skimmed milk answers well) and then diluting with an equal quantity of water, or by shaking up a mixture of milk, kerosene and water in equal parts, and then adding more water, taking care not to add so much as to cause the mixture to separate. Sprinkle or spray it upon the infested twigs and branches. Soap is an excellent remedy. Make a solution of whole oil soap, one-fourth of a pound of soap to a gallon of water, and apply to the infested parts of the tree, repeating the application after a few days. Lye is said to have been used with good success, but is considered unequal to soap.

PROF. ROBBINS says in the American Bee Journal: "Last year, in reading some of the discussions at bee-keepers' conventions, I do not remember which one) one gentleman said, in unting bees, he took slices of raw onions and put in the colonies to be united, the night before, and the next morning put them together. The bees all smelling of onions, there was no fighting. I have done this repeatedly with the best of success, and I desire to thank the gentleman, although I don't remember his name, for it has been worth much to me. Last month I received two beautiful dollar queens from Kentucky. After receiving them I put them into Peet combination cages and having secured two black queens I placed a caged Italian with each queen colony! After two days I examined and found one of the queens liberated and all right; the other I found in the cage dead; also the bees that came with her. There had been no effort to liberate her. We had a small nucleus in the yard, and my wife put a piece of onion in it and a piece in the hive with the dead queen. After two or three hours, the comb from nucleus with queen and bees were put in the hive and "everything went merry as a marriage bell." No disturbance among the bees; and the queen went right along as though she had always been there. Now if bees go entirely by scent, why not make the queens and bees smell like onions, and put them in without any cage?"

Some thirty or forty years ago there was much more honey produced in eastern Pennsylvania, and especially in the counties contiguous to Philadelphia, than there is at the present time, and we may ask why less attention is bestowed upon this really important branch of farm industry now than before. It cannot be on account of the price obtained, for that is higher now than we believe at any former period. One person, who had abandoned the business, said that the bees made less honey than formerly, in consequence of the scarcity of clover fields and other feeding resorts of the bees; but this can hardly be, as while it is an undecided question that the cultivation of clover has fallen off, the increase of other bee pastures has clearly taken place. Take for instance the marked increase of fowers in the garden of every farmer, as well as the increase of vegetable crops, many of which put forth immense quantities of blooms. There are many of the cultivated trees also that flower enormously, and far more than make up for all the other losses combined. We rather think that the nice, extra care that bee culture requires over other business to produce the same amount of income, is the cause of its decline. The honey culture, in fact, is a science, and should inspire in those who pursue it a love for it outside of the profit account, and in this case the enjoyment which it imparts must be considered as a part, and a very desirable part, of the returns.

At the October meeting of the Washington County Pomological Society, held at Ann Arbor, Mr. J. D. Baldwin said he had never good success in planting stone fruits in the fall, better with apple and pear trees. He believed in early planting in spring. E. Bur lost of a thousand Cuthmer raspberries planted last fall, seven hundred. The plants were mostly feeble, while of a thousand plants put in in early spring he lost none, many plants bearing fruit. In the fall of the centennial year, he planted fifteen pear trees and thirty early peach trees, the pear trees all blighted and had to be cut down the next year to a stump, they grew up since however, but most of them have a feeble existence. All the peach trees lived; he had dry straw tied around them. Grape vines could safely be planted in the fall, if a mulch was put around them. Strawberries should be planted in early fall. Mr. Bur's exhibit of German prunes attracted general attention. He stated that while seventy-five of his plum trees were all dying, his German prunes were full of green foliage and the prunes still adhering to the trees; even a frost would not hurt the fruit; rather improve it. He was largely propagating prune trees, as he had become weary with the curculio by recent experiments. He describes the health of his trees to their German descent; they were root-shoots from trees imported from Wurtemberg, South Germany.

Protection Against the Canker Worm.

The Massachusetts Ploughman says on this question: "Those who have tree protectors should lose no time in putting them in order and filling them with oil, and those who depend on tarred paper and tree ink, should see to it that the paper is put on at once and kept covered with some sticky substance until cold weather sets in. After the ground freezes there is no danger of the grubs going up until it thaws out again. Sometimes the weather is warm enough during the winter months to thaw the ground, and for the grubs to go up the trees in large numbers, but this is not usual. November, March and April are the months that most of the grubs go up, therefore these are the months that the protectors should be watched the closest, but they should not be forgotten in the winter if the weather be warm.

"Those who cannot keep a constant watch over their trees should provide their orchards with patent tree protectors, which require but very little looking after; but those who can look after them, and do not feel able to purchase protectors, can at a very small outlay, protect their trees with tarred paper, covering it with a preparation of resin and linseed oil; one part of the former to three of the latter, the proportion to be varied according to the state of the weather, using a larger proportion of oil during cold than warm weather. Many persons who use tarred paper, do not use strips wide enough to prevent the grubs from bridging it over with their dead bodies, in seasons when large numbers go up in a single day. If the strip be 12 inches wide, there will be but little danger of grubs getting over, unless the paper is permitted to get dry."

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A. M. PURDY says in the Fruit Recorder: "We noticed on some Delaware vines in Ulster County, the Phylloxera. They are quick, and easily detected. The leaves—especially the smaller and more tender, were covered on the under side with small knotty or warty protuberances. These contain a small worm, and as the leaf ripens and drops to the ground, this worm passes into the ground and down to the roots, and there does its work of destruction. All such leaves should be picked off at once and burned."

At a late meeting of the Kentucky Horticultural Society members were warned to be on their guard when purchasing Wild Goose plum trees, for thousands of trees were sold as such that had no right to the name. The following description of the true Wild Goose was given: The fruit should be large, about one inch, or over, in diameter, more round than long, turns yellow three or four days before it becomes red and ripe, and when ripe is covered with bright and beautiful golden specks about the size of a pin head.

Mr. WILLIAMS, owner of a large orchard in Williamsburg, Mass., says that he has observed this year for the first time a difference in the shape of the Baldwin trees that bear in the old and the new year. The difference is quite noticeable, when it is once pointed out. The even year tree has long and slender branches, reaching out in all directions, while the old tree is more scrubby, the branches growing closer together on the top. These facts, if corroborated, may be of importance to those who wish to graft the Baldwin.

The owner of a large apple orchard in Massachusetts, whose trees are this season loaded with fruit, attributes no mean part of his success to his manner of setting the trees and the care he takes in removing all wind-falls and imperfect fruit. He digs a hole about five feet square, in which he sets the young tree, and then he fills it with good soil and well made compost. He never plows his orchards, but applies manure upon the surface. Observation has taught him that the little rootlets of the apple tree come to the surface of the ground for any nourishment which may be there.

The citrus men of Los Angeles have made a discovery of great value to Florida. Dry sand is the best packing for oranges and lemons. The fruit must touch the sand. Experience warrants keeping for five months at least. The dry sand has absorbing power that apparently takes up all exudations subject to decomposition, the rind being very

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Some thirty or forty years ago there was much more honey produced in eastern Pennsylvania, and especially in the counties contiguous to Philadelphia, than there is at the present time, and we may ask why less attention is bestowed upon this really important branch of farm industry now than before. It cannot be on account of the price obtained, for that is higher now than we believe at any former period. One person, who had abandoned the business, said that the bees made less honey than formerly, in consequence of the scarcity of clover fields and other feeding resorts of the bees; but this can hardly be, as while it is an undecided question that the cultivation of clover has fallen off, the increase of other bee pastures has clearly taken place. Take for instance the marked increase of fowers in the garden of every farmer, as well as the increase of vegetable crops, many of which put forth immense quantities of blooms. There are many of the cultivated trees also that flower enormously, and far more than make up for all the other losses combined. We rather think that the nice, extra care that bee culture requires over other business to produce the same amount of income, is the cause of its decline. The honey culture, in fact, is a science, and should inspire in those who pursue it a love for it outside of the profit account, and in this case the enjoyment which it imparts must be considered as a part, and a very desirable part, of the returns.

At the October meeting of the Washington County Pomological Society, held at Ann Arbor, Mr. J. D. Baldwin said he had never good success in planting stone fruits in the fall, better with apple and pear trees. He believed in early planting in spring. E. Bur lost of a thousand Cuthmer raspberries planted last fall, seven hundred. The plants were mostly feeble, while of a thousand plants put in in early spring he lost none, many plants bearing fruit. In the fall of the centennial year, he planted fifteen pear trees and thirty early peach trees, the pear trees all blighted and had to be cut down the next year to a stump, they grew up since however, but most of them have a feeble existence. All the peach trees lived; he had dry straw tied around them. Grape vines could safely be planted in the fall, if a mulch was put around them. Strawberries should be planted in early fall. Mr. Bur's exhibit of German prunes attracted general attention. He stated that while seventy-five of his plum trees were all dying, his German prunes were full of green foliage and the prunes still adhering to the trees; even a frost would not hurt the fruit; rather improve it. He was largely propagating prune trees, as he had become weary with the curculio by recent experiments. He describes the health of his trees to their German descent; they were root-shoots from trees imported from Wurtemberg, South Germany.

It is a New York jelly manufactory the value of the apple seeds extracted from the pomace is sufficient to pay the daily wages of the men employed.

A. M. PURDY says in the Fruit Recorder: "We noticed on some Delaware vines in Ulster County, the Phylloxera. They are quick, and easily detected. The leaves—especially the smaller and more tender, were covered on the under side with small knotty or warty protuberances. These contain a small worm, and as the leaf ripens and drops to the ground, this worm passes into the ground and down to the roots, and there does its work of destruction. All such leaves should be picked off at once and burned."

At a late meeting of the Kentucky Horticultural Society members were warned to be on their guard when purchasing Wild Goose plum trees, for thousands of trees were sold as such that had no right to the name. The following description of the true Wild Goose was given: The fruit should be large, about one inch, or over, in diameter, more round than long, turns yellow three or four days before it becomes red and ripe, and when ripe is covered with bright and beautiful golden specks about the size of a pin head.

Mr. WILLIAMS, owner of a large orchard in Williamsburg, Mass., says that he has observed this year for the first time a difference in the shape of the Baldwin trees that bear in the old and the new year. The difference is quite noticeable, when it is once pointed out. The even year tree has long and slender branches, reaching out in all directions, while the old tree is more scrubby, the branches growing closer together on the top. These facts, if corroborated, may be of importance to those who wish to graft the Baldwin.

The owner of a large apple orchard in Massachusetts, whose trees are this season loaded with fruit, attributes no mean part of his success to his manner of setting the trees and the care he takes in removing all wind-falls and imperfect fruit. He digs a hole about five feet square, in which he sets the young tree, and then he fills it with good soil and well made compost. He never plows his orchards, but applies manure upon the surface. Observation has taught him that the little rootlets of the apple tree come to the surface of the ground for any nourishment which may be there.

The citrus men of Los Angeles have made a discovery of great value to Florida. Dry sand is the best packing for oranges and lemons. The fruit must touch the sand. Experience warrants keeping for five months at least. The dry sand has absorbing power that apparently takes up all exudations subject to decomposition, the rind being very

Fortune.

May be made by a hard work, but neither can be made or enjoyed without health. Loose's Extract of Red Clover Blossoms stimulates the liver, purifies the blood, and is the best remedy for any disease arising from impure blood. For sale by all druggists.

NEW ADVERTISEMENTS.

HOLLAND BULBS. ROSES AND PLANTS. MILLIONS OF THEM. Our Fall Catalogue is the best and most complete ever issued. Full instructions for culture, and prices of all the best horticultural seed FREE.

FARMERS. A 100 page book with recipes for the treatment and cure of all horse and cattle diseases, with 2500 engravings, sent for \$1.00. Address: KEES & SANFORD, 17-19 St. Paul St., Detroit, Mich.

CONQUEROR OF ALL KIDNEY DISEASES. HUNT'S REMEDY. THE BEST KIDNEY AND LIVER MEDICINE. NEVER KNOWN TO FAIL. I had suffered twenty years with severe disease of the kidneys; before using Hunt's Remedy two days I was relieved, and am now well.

THE GREAT BURLINGTON ROUTE. CHICAGO BURLINGTON & QUINCY. THE SHORTEST, QUICKEST AND BEST LINE TO ST. JOSEPH, MO. AND ALL THE GREAT WESTERN CITIES.

CHICAGO OF PEORIA TO KANSAS CITY. All connections made in Union Depots. Through Tickets via this Celebrated Line for luxury, instead of the U. S. and all the comforts of a first-class Pullman.

KIDNEY-WORT IS A SURE CURE for all diseases of the Kidneys and LIVER. It has specific action on the most important organ, enabling it to throw off torpidity and tension, stimulating the healthy secretion of the bile, and by keeping the bowels in free condition, effecting the regular discharge.

CANCER OFFICE, 202 West 4th St. New York on treatment and cure of Cancer. Sent Free to any address on receipt of stamp. DR. GRATIGNY & NORRIS, Box 598, Cincinnati, O.

NEW ADVERTISEMENTS.

Dr. CLARK JOHNSON'S INDIAN BLOOD SYRUP. Cures all diseases of the Stomach, Liver, Bowels, Kidneys, Skin and Blood. Millions testify to its efficacy in the above named diseases, and pronounce it to be the BEST REMEDY KNOWN TO MAN. Guaranteed to Cure Dyspepsia. AGENTS WANTED. Laboratory 77 West Third St., New York City. Druggists Sell it.

LANDRETH'S PEDIGREE SEEDS. SEEDS For the MERCHANT on our New Plan For the MARKET GARDENER SEEDS For the PRIVATE FAMILY SEEDS Grown by ourselves on our own Farms. Handsome Illustrated Catalogue and Rural Register FREE TO ALL. MERCHANDISE, SEND US YOUR BUSINESS CARDS FOR TRADE LIST. DAVID LANDRETH & SONS, SEED GROWERS, PHILADELPHIA.

MICHIGAN CENTRAL RAILROAD. Limited Fast Train. Leave Detroit. Arrive. Day Express. 7:30 A.M. 11:40 P.M. Mail (via Main & Air Line). 7:30 A.M. 11:35 P.M. Jackson Express. 7:30 A.M. 11:30 P.M. Grand Rapids & Kalamazoo. 7:30 A.M. 11:25 P.M. (a) Evening Exp. 7:30 A.M. 11:20 P.M. (b) Evening Exp. 7:30 A.M. 11:15 P.M. Grand Rapids and Muskegon. Fast Express. 7:30 A.M. 11:40 P.M. Day Exp. 7:30 A.M. 11:35 P.M. Jackson Express. 7:30 A.M. 11:30 P.M. Grand Rapids & Kalamazoo. 7:30 A.M. 11:25 P.M. (a) Evening Exp. 7:30 A.M. 11:20 P.M. (b) Evening Exp. 7:30 A.M. 11:15 P.M. DETROIT AND BAY CITY DIVISION. Bay City & Saginaw Exp. 7:30 A.M. 9:35 P.M. Marquette & Mackinaw Exp. 7:30 A.M. 11:25 P.M. Michigan Express, with sleeping car. 7:30 A.M. 11:20 P.M. *Sundays excepted. (Daily) (a) Saturdays excepted. *Sundays excepted. W. RUGGLES, General Passenger Agent, Ticket Office 154 Jefferson Ave. and Depot Foot of Third St. Trains run by Chicago time.

DR. HENRY BAXTER'S MANDRAKE BITTERS. There is no excuse for suffering from CONSTIPATION and other diseases that follow a disordered state of the Stomach and Bowels, when the use of DR. HENRY BAXTER'S MANDRAKE BITTERS will give immediate relief. After consultation follows: Biliousness, Dyspepsia, Indigestion, Diseases of the Kidneys, Torpid Liver, Rheumatism, Dizziness, Sick Headache, Loss of Appetite, Jaundice, Dropsy, Eruptions and Skin Diseases, etc., all of which these Bitters will speedily cure by removing the cause, keeping the Stomach, Bowels, and Digestive Organs in good working order, and perfect health will be the result. Ladies and others subject to Sick Headache will find relief and permanent cure by the use of these Bitters. Being tonic and mildly purgative they PURIFY THE BLOOD. Price 25 cts. per bottle. For sale by all dealers in medicine. Send address for pamphlet, free, giving full directions. HENRY, JOHNSON & LOUD, Props., Burlington, Vt.

CANADIAN SOUTHERN RAILWAY. Depot foot of Third street, Detroit, Mich. Buffalo Trains. Depart. Arrive. Atlantic Express. 4:00 A.M. 9:40 P.M. Fast Day Express. 7:30 A.M. 11:35 P.M. Lightening Express. 7:30 A.M. 11:30 P.M. Buffalo Express. 8:00 P.M. 8:15 P.M. Saginaw, Chicago and Cincinnati Express. 6:40 10:50 A.M. The 10:50 A.M. and the 9:30 P.M. trains arrive and depart from Detroit at the Third Street Depot.

Fort Wayne & Jackson R.R. THE SHORT LINE. For all points South, Southern and Southwest, including Philadelphia, Baltimore, Washington, Cincinnati, Louisville, Indianapolis and St. Louis. Commencing Thursday, June 1st, 1882, trains will leave as follows: SOUTH. EXPRESSES. ACCOM. Lv. Bay City. 5:35 P.M. 7:00 A.M. Saginaw. 8:30 7:58 Detroit. 9:25 7:58 Jackson. 9:30 7:58 Grand Rapids. 10:30 7:58 Detroit. 9:30 7:58 Chicago. 10:30 7:58 St. Paul. 11:30 7:58 St. Louis. 12:30 7:58

Detroit, Lansing and North Western Railroad. On and after Sunday, Oct. 15, 1882, trains will arrive and depart from Detroit as follows: Going West. Detroit. 5:45 A.M. 7:30 A.M. 9:15 A.M. 11:00 A.M. 12:45 P.M. 2:30 P.M. 4:15 P.M. 6:00 P.M. 7:45 P.M. 9:30 P.M. 11:15 P.M. Lansing. 6:15 8:00 9:45 11:30 1:15 3:00 4:45 6:30 8:15 10:00 11:45

WADSWORTH, ST. LOUIS & PACIFIC R.R. Depot foot of Brush Street. Trains run on Chicago time. Arrive. Indianapolis. 8:10 A.M. 8:10 P.M. Butler Express. 8:10 A.M. 8:10 P.M. St. Louis. 8:10 A.M. 8:10 P.M. *Trains leave Third Street depot, via Toledo Detroit time. 7:40 A.M. 9:00 P.M. *Sundays excepted. *Sundays excepted. Pullman sleeping car to Indianapolis and Louisville. Ticket office, 107 Jefferson Avenue and at both depots. W. H. UNDERWOOD, City Ticket Agent, FRANK E. SNOW, General Agent.

DR. CLARK JOHNSON'S INDIAN BLOOD SYRUP. Cures all diseases of the Stomach, Liver, Bowels, Kidneys, Skin and Blood. Millions testify to its efficacy in the above named diseases, and pronounce it to be the BEST REMEDY KNOWN TO MAN. Guaranteed to Cure Dyspepsia. AGENTS WANTED. Laboratory 77 West Third St., New York City. Druggists Sell it.

General News.

Yellow fever is decreasing at Pensacola. The reduction in the public debt in October was \$15,641,425. Senator Brown, of Georgia, will resign on account of ill health. Several colored families have left New York to settle in Liberia. Miss Parlow, the great cook, has opened a cooking school in New York. It is estimated that it will require \$28,327,864 to run New York the coming year. A Cincinnati jury has declared William Smith guilty of murder in the first degree. There was snow all along the line of the Northern Pacific in Dakota and Montana last week. A church to cost \$100,000 is to be built at Palatine, Texas, by contributions of a nickel each. A citizen of Wabash, Ind., died last week, aged 107 years. His name was Isaac Newsbaum. The N. Y. Central freight depot at Rochester, N. Y., was burned \$100,000 worth last week. The population of El Paso, Tex., has increased from 300 to 3,500 within eighteen months. Lawrence Barrett's father died in Baltimore last week. He formerly lived at Ann Arbor, this State. The Canada Atlantic railway from Ottawa to Montreal was formally opened on Monday last week. The Virginia State Fair opened at Richmond on Wednesday, with 20,000 people in attendance. Contractors are pushing work on the Michigan & Ohio railroad, which runs from Toledo to Allegan. The headquarters of the entire Wabash system of railroads have been moved to Chicago from St. Louis. The office of the American express company of Winnipeg, Man., was robbed of \$10,000. No particulars. Hallett Kilbourne has sold his interest in the National Republic to Frank Hatter, Assistant Postmaster General. The largest grizzly bear ever killed in Idaho was slain last week. It weighed 1,400 lbs. Its claws were seven inches long. Admirers of the bandit and murderer, Frank James, have presented him with a Brussels carpet for his cell floor. Frank Queen, late editor of the New York Courier, a rather notorious sporting sheet, is reported to have left about \$150,000. John Gross, a colored boot-black of New York city, has just received \$50,000, left him by his father, who died a number of years ago. The Cokerhill-Slayback murder trial in St. Joseph has been continued until November 21. Over \$50,000 has been raised for Mrs. Slayback. The total national debt, less cash in treasury, on November 1st, was \$1,028,401,042. Financiers predict its total extinguishment by 1890. Sarony, who paid Oscar Wilde \$1,200 for the exclusive privilege of photographing him, has paid Mrs. Langtry \$5,000 for the same privilege. It is a curious fact that nearly four times as many immigrants are daily arriving in this country from prosperous Germany as from troubled Ireland. L. M. Vance, a prominent citizen of Franklin County, Mo., was killed last week by becoming entangled in the lines of a pair of runaway mules. Glucose seems to be an almost universal adulterant. It is used in honey, table syrups, beer, confectionery, and now they are selling it for glycerine. By the collision of two freight trains on the Illinois and St. Louis railroad on Thursday last, a brakeman was killed and ten freight cars burned. James W. Simonon, for many years general agent of the associated press at New York, died of heart disease at his residence in Napa, Cal., last week. Hair & Odorine, lumber dealers, have failed. Liabilities, \$300,000; assets, \$200,000. The firm handled 25,000,000 feet of lumber yearly, and stood well in the trade. Fred. Hogan, a salesman in the employ of the importing house of Moore & Co. of Philadelphia, has been arrested for defrauding his employers out of \$10,000. Patrick Carey, a New Yorker, crippled for life by the fall of a coal tub into the hold of the steamer Bantia, has been awarded \$15,000 damages against the Central Steamship Company. Wm. G. Russell, paying teller of the Pennsylvania company for the insurance of lives and granting annuities in Philadelphia, has disappeared, leaving a shortage of \$50,000 in his accounts. Mrs. Seguin, of New York city, last week murdered her three children and herself, while suffering from temporary insanity. Dr. Seguin, her husband, is nearly insane over the occurrence. Vanderbilt made more money out of the walking match at New York than any of the contestants. The receipts were \$19,767, of which he received \$10,000 for the place it was held in. For the 12 months ended Sept. 30, 1882, there was an excess of imports over exports of \$12,141,899. For the corresponding period of 1881 there was an excess of exports over imports of \$240,340,230. Contrary to all expectations Miss Bond, the victim of the outrage at Taylorville Ill., which three men narrowly escaped lynching, is slowly improving, and it is said her complete recovery is probable. A party of German astronomers have been sent to this country to observe the transit of Venus. They have sailed near Trinity Coast, Hartford, Conn., and will occupy rooms in the college during their stay. Lotia, the actress, has been awarded \$17,000 in her suit against B. F. Randall, a cotton broker of Fall River, Mass., for money loaned to her to support her expenses. Postmaster General Howe has made an order giving postmasters discretion in returning letters to writers upon application and the proper proof. Hereafter this power was to be used only in the Postmaster General's office. Wm. Poronto, superintendent of the Grinnell mine at Central City, Col., had a fight with a bear about ten days ago. He succeeded in killing the brute with a knife, but not until he had received fatal injuries himself. Last week in a race between Billy D. and Yellow Dock at Narragansett Park, Providence, R. I., for \$2,000, Yellow Dock with running mate made the last mile in 2:11, the best time ever made in public by a trotter. Frank H. Howe, chief clerk in the postoffice department, has been appointed to accept the position of Assistant Attorney General in the department of justice. N. A. C. Smith has been appointed temporarily to fill his place. Passenger rates to points on the Pacific Coast have been lowered 85. This is made necessary by the action of the Texas Legislature in fixing passenger rates within that State to three cents per mile. Good for Texas. A man named Mitchell was arrested in Cincinnati on Monday last week, on suspicion of being the murderer of Arthur Ross, the merchant recently found dead, and on Friday morning he was found dead in his cell. Dr. Martin, who had been sent down to Pensacola by the National Board of Health to investigate the origin of the yellow fever there, has been stricken down by the disease. He ought to be able to tell all about it. Pinkerton's detectives are investigating alleged colonization and false registration of voters in New York city, and the District Attorney is preparing to bring the matter before the Grand Jury. It is said that 30 ward voters have been indicted, and that 1,500 illegal voters have been registered in a single district. Postmaster General Howe has declared F. E. Wall, doing business at 1227 Market Street, Philadelphia, and 1266 Broadway, New York,

NEW ADVERTISEMENTS.

FARMERS! YOU SHOULD WEIGH WHAT YOU SELL AND BUY THERE IS MONEY IN THE PRACTICE Every farmer should have the means of weighing his produce before he sells it, and also what he buys as a matter of economy there is nothing that will pay him better. The high price of scales prevents many from providing themselves with them, and they are thus at the mercy of every dishonest party they may do business with. One of the very best makes of scales now on the market are those made by the Chicago Scale Co., and for the benefit of those who read the FARMER we have arranged with that company to supply orders sent through us at a great reduction. The prices are so low that the saving of loss on a load of wheat, pork, wool, poultry or butter, will pay the entire cost. Just look at the prices below and judge for yourselves. No. 1—Housekeepers' Scale, weighs from 1/2 oz to 25 pounds. Price \$4.00, and MICHAEL FARMER one year. \$5.00 with tin scoop 50c extra. Brass scoop 75c extra. No. 2—Family Scale, weighs from 1/2 lb to 250 pounds. Size of platform 10 1/2 by 13 1/2 inches. Price \$7.00 and MICHAEL FARMER one year. No. 3—Farm Scale, weighs from 1/2 ton to 2000 pounds. Size of platform 17 by 26 inches. Price \$20.00, and MICHAEL FARMER one year. With wheels \$20 extra; or \$2. No. 4—Farm Scale, weighs from one pound to 600 pounds (3 tons); size of platform 6 by 12 feet. Price, \$10, and MICHAEL FARMER one year. No. 5—Grain and stock Scale, weighs from two pounds to 10,000 pounds (5 tons); size of platform 8 by 14 feet. Price \$35, and MICHAEL FARMER one year. In ordering, give the number of scale you select. When ordering singly No. 1 will be sent by express the rest by freight. Nos. 4 and 5 will include the beam, box, and full directions for setting up; either of these scales can be used for hay, grain, coal, stock and merchandise; it is only difference is in the platform. All will be boxed and delivered at the depot in Chicago without extra charge. Every scale will be perfect and will be so guaranteed by us and the manufacturers, and the prices above are only one half or one third the usual prices for the same articles. To get the scales at above prices of course the order must be sent to us, and the sender must become a subscriber to the FARMER if he is not one now. JOHNSTONE & GIBBONS, DETROIT, MICH. Sharpsteen's Lavender Ointment A sharp, vegetable, internal or external Pain Destroyer that is not and prescribed by its most eminent physicians. It gives instant relief in Asthma, Croup, Hay Fever, Coughs, Hoarseness, Croup, Quinsy, Diptheria, Neuritis of the Stomach or bowels, Piles, Burns, Scalds, Sore or Cracked Ears, Inflammation, Caked or Broken Breasts, Sore Nipples, Chafes on Babies or Adults, Poisonous Wounds, Broken Bones, Chills, Sore Sores, and all other ailments. It is also a powerful and reliable remedy for the cure of the bone in man or beast in a very few moments, and is soothing, cooling, cleansing, a powerful purgative and relieves soreness, swelling and painful joints as soon as it is thoroughly applied. Horse Distempers, Erysipelas, Ringworm, Mouth, Sore Eyes, Coughs, Swelled Glands, Hoarse Distemper, Kicks, Calks, Calks, Scattered, Hoof Rot, Quarter Cracks, Diseased Hooves, Sprains, Strains, Cracked or Sore Teats, Caked or Gargled Bag, it having no equal in curative power and does not hurt the patient. It is also a powerful and reliable remedy for the cure of the bone in man or beast in a very few moments, and is soothing, cooling, cleansing, a powerful purgative and relieves soreness, swelling and painful joints as soon as it is thoroughly applied. 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Poetry.

SIMILIA.

In sweetest verdure near my home
A rose-bush grows to glad my eye;

One day a lovely larva sped
With toiling stretches toward my pet;

Then off to meadows fair it flew.
All day it roamed 'mid trees and flowers,

And now upon the ground he lay.
In hopeless, helpless grief and pain.

He moved again—'twas mercy's thought—
His final rest was all he sought;

Had he not been so glad to die?
And that stupid boy lies here in the dew.

How could the father, my children, know
That the greatest astronomer earth can show,

Who was late in getting the milking done?
But weary of hours in the after years,

And that stupid boy lies here in the dew.
With his face upturned to the moon and stars!

How could the father, my children, know
That the greatest astronomer earth can show,

Who was late in getting the milking done?
But weary of hours in the after years,

And that stupid boy lies here in the dew.
With his face upturned to the moon and stars!

How could the father, my children, know
That the greatest astronomer earth can show,

Who was late in getting the milking done?
But weary of hours in the after years,

daughter are spending a few weeks at the
Surf Hotel, was the announcement in the
society papers, and it was followed by a
description of the costume worn by each at
the last garden party.

Pearl's airy yet imperative assertion,
" We shall talk to-day," was so eagerly
seized upon that within two minutes she
and Mr. Floyd presented a very cozy
picture of friendly intimacy.

He had drawn his chair near her in vis-
a-vis fashion, and leaning forward, very
softly caressed the ribbons upon her dress
with the fan that he had taken from her
hand. There was literally no sentiment to
be heard, but something in the cadence of
his most every-day remarks and in the
rippling murmur of her answer was a
whole love story, though the words might
have passed unchallenged by the greatest
gossip a sea side hotel ever harbored.

"Where your mother?" was what he
really said, while his voice kept singing to
ano right through every syllable.
" There she is, half asleep in that fold-
ing-chair," answered Pearl, touching the
end of the fan that he held.

"Did you have a nice time with the fish-
ing party yesterday?" He tapped the
turquoise ring on her third finger.
" Rather nice—not very." She looked at
the ring and the gold complemently.

He wasn't with the fishing party, so he
advanced the fan up to a bangle on her
bracelet, and whispered: "Fishing's stupid,
anyway. Talking's better, isn't it?"
" Sometimes," she murmured. Then
there fell a sacred silence, as if very daring
expressions had passed.

Presently Floyd sighed, then feeling it
necessary to say something commonplace
to avoid saying something desperate, he
remarked, "There's old Sam Barr at the
corner of the piazza, gossiping with old
Miss Collins."

Pearl laughed and answered: "I call
Mr. Barr 'Old Crabby.' He's ugly and
mottled and awkward and tough, like those
big crabs that shuffle and slide about down
in the river."

"I call him 'Barr Sinister,'" said Floyd.
" Oh," Pearl went on again, "it's so
funny to see him talking to Miss Collins.
They're just alike."

"Yes, she's as ugly as he is, and as rich
—even richer—and every day as old."

"She's sixty, at least," responded Pearl,
talking unaturally fast, that she might
seem unconscious of the rapid look bent
upon her. "And she's such a queer old
woman, with that false front, and that
great cap, and that rusty black silk dress.
I wonder how it seems to sit in a wheel-
chair and wear such a gown, and be wrink-
led and hideous!" and she puckered up
her lips in comic disgust.

"I wonder what the two talk about?
About their money, I suppose," Floyd
remarked; then addressed himself to care-
fully picking up with the fan sundry frills
of lace that ornamented Pearl's sleeve.

"Isn't it drying weather?" she hazarded,
by way of starting conversation again.
" Yes," answered Floyd, "yes; but I
wasn't thinking about the weather."

"Oh, you were thinking about my laces,
perhaps. Take care, or you'll spoil them."

"I was thinking," he said, "about—
about—you—" he stopped a moment, then
flushing crimson, and lingering on the
word as he pronounced her name, went on
—"about you, Pearl."

little icicles about her heart—" Pearl, Mr.
Barr asks you to attend the races with him
to-morrow. You will go, of course, my
love."

"Oh, mamma, but I'm to go sailing with
Mr. Floyd."

"Nonsense! These little sailing excursions
don't bear the dignity of engagements.
My daughter accepts your invitation with
pleasure, Mr. Barr. I feel I can trust her
with you. She's such a dear child that I
am generally anxious when she's away from
home; never, though, when she's with you."

"Thank you, ma'am," answered Barr,
with meaning. "I hope always to deserve
your good opinion."

"There's no doubt of that," and she
smiled benignly. "My dear, Mr. Barr is
waiting to shake hands with you."

Pearl, having fallen back into reverie,
again started, and mechanically let her
finger-tips fall upon the square, tough,
extended palm. But Barr grasped the
whole pretty fragile hand, and, stooping,
touched it with his tight old lips. She
growned and snatched her hand away, then
meeting her mother's look, tried to soften
the action by giving a forced, nervous
laugh.

"I'll have up my four-in-hand for you
to-morrow," said Barr, and shuffled off in
his own peculiar fashion.

"Pearl," Mrs. Courtney's silvery voice
enunciated, "come to my room."

No one would have suspected that
smooth mamma of being under any mental
excitement; but her daughter knew from
some subtle quality of the sunshine that the
storm was near, and she followed to the
room with a reluctant tread. Once within,
"Shut the door," said Mrs. Courtney,
"and sit here, just opposite me."

She obeyed, and the mother, still with
that deadly calm, opened the business of
the interview.

"I was observing, my daughter, the very
foolish little love passage between you and
young Floyd."

"Mamma, he was saying only the most
commonplace things."

"Pearl, I'm not a child. No matter
what he said, he was making love to you,
and you were receiving his advances, and
that under the eyes of the best match in the
country."

"Do you mean old Barr?"

"I mean Samuel Barr, who can give his
wife an establishment and a position. He's
a man who wields power, and whose
wealth is fabulous."

dress that, worn over a delicate pink, made
a slight pallor less observable. Then they
went to dinner, and Carroll Floyd, as the
lily white beauty passed him by, murmured:

"Dear love, you look like an angel."
So she did, but that unthrifty young
man forgot that even angels require plum-
age.

The whole evening the mother and Mr.
Barr were continually at Pearl's side, so
Floyd waited with impatience for the
morning and the morning sail. The boat
was ready, and he had sent a bunch of
white rose buds as a reminder, when up to
the hotel Sam Barr's four-in-hand came
rattling. Presently the old crab him-
self appeared on the stairs, and with him—
Pearl Courtney. She nodded pleasantly
to her young lover in passing, then gayly
mounted to the boat seat of the drag, and
under Floyd's flashing eyes drove off with
old Barr.

The young fellow, enraged, yet puzzled
and distressed, dismissed the boat, and
began striding up and down a back piazza,
out of sight of polite sea-side loungers,
and trying to believe she had forgotten the
engagement. A window opened just above
him, and something carelessly thrown out
lodged in the grass not far from his feet.
It was the bunch of white rosebuds, his
gift of a few minutes before. He clinched
his two strong hands and clinched his
white teeth, then rushed upstairs to accuse
Mrs. Courtney of the insult. At the first
landing he remembered that the maid might
have ignorantly thrown away the flowers,
and remembered, too, that he would be
sure to make a fool of himself in any en-
counter with Mrs. Courtney's high-bred
courtesy and calm. So he waited for
evening.

Time does pass by eventually. Even
days of torture have an end. Evening did
come at last, and with it the opportunity
to speak to Pearl.

Miss Collins happened to be down stairs,
and Barr forbore his devotion for a few
minutes while he led the old lady to an
arm-chair and settled her in it comfortably.
Floyd made his conventional bow, then
began, in an eager, husky voice:

"Miss Courtney—Pearl—did you forget
our engagement yesterday?"

"Oh, not exactly," she answered, care-
lessly, "but I wanted so much to see the
races, and one can sail any day."

Floyd grew more hoarse, but tried to
speak steadily and distinctly. "Do I un-
derstand, then, that you prefer Mr. Barr
to me?"

She regarded him with a haughty stare.
"I don't mean to be rude," he went on,
passionately, "but my whole happiness
hangs upon you. I can't choose my words.
See!" He held out his trembling hand.

"You are more than life to me, Pearl. I
believed yesterday that you loved me; tell
me, was I mistaken?"

"You were mistaken," she responded,
with a little quaver in her voice, but set-
ting her lips together tight.

He gave a sort of smothered groan, then
asked, grasping the back of a chair, that
he could not see how he had managed to
be so stupid. "Do you mean, then, to accept
attentions from this old man, this coarse,
ugly old wretch, this—"

"Mr. Floyd"—and Pearl rose indignantly—"you will please speak more respect-
fully of Mr. Barr."

"Heavens!" cried Floyd, forgetting he
stood near a crowded parlor, "you don't
mean to—marry him?"

"Now, ma'am"—the lesson began.
"Miss Pearl here wants a crab for her
luncheon, and very properly too. She's a
lovely girl, nature seems to design that
she's to have all the delicacies of the sea-
son. Now, then, young lady, look for
your game, please."

"Oh," cried Pearl, "I see such a
pretty shiny fish!"

"A very pretty fellow indeed, Miss
Pearl, but he ain't good to eat. He's
smooth and handsome, but you'd starve
with him. Better look out for a fat old
crab."

"Well," said Pearl, "there's a crab.
Oh, I see him shuffling along, and putting
off his horrid grappling claws. See! see!"

"Aha!" Barr chuckled, delightedly,
"there's the fellow for a dainty young
lady! Now, ma'am, you'll see Miss Pearl
ketch him. Here's the bait, a nice piece of
chicken, white and tender and tempting.
Now you tie it on a piece of string, and
shake it before old crab's eyes."

"Yes, yes; and he sees it," Pearl cries
out eagerly.

"He sees it, yes; and he goes all round
it, and—now he puts out a claw to
feel of it. There, hold your dainty bait
still. It ain't forced on to him; it's just a
sweet little morsel a-lyin' there, with no
harm in it at all, and the old crab thinks
he's a-goin' ter have it for his own. Now
walkin' round and round, and now he's off
a way lookin' at it."

"Oh, mamma, see what an ugly creature
it is!" exclaimed Pearl.

"Yes, ma'am, a very ugly old creature."
He ought ter be glad of a bit of tender
spring chicken, oughtn't he? So he is;
see, he's snapped at the bait. Ha! happy
old crab! Now, Miss Pearl, he's taken
hold. You're sure of him, ain't you?—
dead certain sure of him, eh?"

"Yes, yes, quite sure. Shall I pull him
up and get the landing-net?" she said.

"Easy now, easy. You're sure of him.
Now, ma'am, and he turned to Mrs.
Courtney, "you see Miss Pearl's sure of
that ugly but fat old crab that you can
lunch off of to your heart's content, eh?"

"Of course, Pearl has only to land
him."

"Only to land him," chuckled Sam
Barr. "Now, my pretty young lady,
take your net. Here it is. So. Slip it
under. Steady!"

Pearl took the net; steadily and slowly
she slipped it under the apparently con-
tented creature that was devouring the
bait; cunningly near she carried it; then
with a jerk brought it up. There was a
struggle, a splash, and—the landing-net
was empty!

"Oh," cried Pearl, "the hateful thing
has got away!"

just as far as the little nature shut up in
that charming white and blue veiled
casing conceives of happiness; though
sometimes she remembers that August
day on the piazza, and wonders why in all
her life she never could feel again just as
she did while Carroll Floyd held one end
of her fan and she coyly touched the other.

Poor Floyd fought along at the bar, and
married a good girl, and was called clever
long before he was called rich.

As to Sam Barr, why, he married old
Miss Collins, wheel-chair and all. Their
estates at the lower end of Fifth Avenue
joined one another. Sam says, "We're
two old crabs, and we've settled down to a
crabbed old life that suits us." Then he
chuckles, and thinks of pretty Pearl
Courtney and her lady mother, and the
great joke he played upon them.—Harper's
Bazar.

Property Rights of Wives.

In recent years the laws of England
and of the United States have been
gradually enlarging the rights of mar-
ried women. This has been especially
the case with regard to the property
which married women possess at the
time of marriage, or which they acquire
afterwards.

Formerly, married women had but
few rights in property. Their posses-
sions, whether held or inherited, or the
fruits of their own labor, were deemed
to belong of right to their husbands;
who also exercised a very complete
physical control over their wives.

The English parliament, in its late
session, passed a measure which ex-
tends the rights of married women in
their property to a further limit than
ever before.

By this measure a married woman
may not only have separate property,
but may make contracts in respect to
it which bind her alone; she may also
freely dispose of her separate property,
not only her real estate, but her "wages
and earnings." She alone becomes lia-
ble for her contracts and property
debts, on which she may now be sued
separately from her husband.

In view of this change in the Eng-
lish law, it is interesting to know
what rights the laws of the United
States now accord to married women.
It will be found that they are quite as
broad as the rights just granted to
English married women.

As the law does not differ materi-
ally in different states, three or four of
the larger states may be taken as il-
lustrations.

In Massachusetts, both the real es-
tate and the personal property of a
woman remain her separate possession
after her marriage. She may "hold,
manage and dispose of it" as if she
were single, so long as she does not
destroy her husband's "right of court-
esy."

She may freely make binding con-
tracts with anyone except her husband.
She may work for herself, and is en-
titled to the separate control of the
fruits of her labor. She may execute
or administer estates, and become a
trustee, without the consent of her
husband.

She may make a will as if she were
single; and, aside from her husband's
"courtesy," can leave her property to
whom she wishes. She may sue and
be sued; is not liable for her husband's
debts, nor is he for those of her debts
contracted in a business conducted by
herself separately.

In New York the wife's property ac-
quired before marriage, remains hers
after marriage, as in Massachusetts.
She may inherit property and hold it
as her own. She may insure her hus-
band's life. She may vote on the stock
of incorporated companies. The hus-
band and wife may be jointly sued for
the wife's debts, but the estate of the
wife alone is liable for such debts.

In New York, too, as in Massachu-
setts, the fruits of a married woman's
labor are secured to her alone. She
may carry on any trade or business,
and may freely dispose of her property.
She may make a power of attorney,
and dispose of her effects by will.

are quite as broad in the protection of
the property, rights of wives as the
most recent English measure; and that,
regard are nearly, if not quite as great
as those of her husband.

Bear-Hunting in California.

Robert Lyon of Cliff Glen, Ventura
county, Cal., communicates the fol-
lowing to the Ventura Signal: The
timber-clad hills at the head of the
Matilija seem to be teeming with
droves of grizzly bears. Last week
nine were seen in one day near the
ranch of Rafael Ruiz, some of them
monsters in size, and on Thursday Sen-
or Ramon Ortega shot three grizzlies.
Ortega and his twelve-year-old boy
were riding in the hills above the Ma-
tilija looking for cattle, when one large
grizzly and two that were considerably
smaller came out of the brush and
halted not more than fifty feet in front
of them. Ortega jumped from his
horse to get a good shot, when his
horse got frightened at the sight of so
many bears, and started and ran away
about 100 yards, when he stepped on
his bride and stopped. Ortega took a
good aim at the big bear, and dropped
it dead at the first shot. He then drew
on one of the smaller bears, and it, too,
tumbled in its tracks, never rising
again. The other bear then took to
the brush, followed by a savage dog.
After assuring himself that the two
bears were dead, Mr. Ortega sent his
boy on foot to bring back his horse.

The boy started, but before he got
to the horse his dog, closely pursued
by a savage and angry bear, overtook
him. As soon as the bear saw the boy
he rushed at him, paying no more at-
tention to the dog, and the boy was too
frightened to do anything but stand
still and call to his father to save him.
Ortega seized his rifle and fired just
as the bear had raised on his haunches
to strike the boy; the bullet knocked
the bear down, but he rose and again
rushed at the boy, the blood streaming
from a bullet-hole in his side, and this
time he rushed at the fear paralyzed
boy with bloodshot eyes and foaming
open mouth. With a last cry, "He's
got me, father!" the frightened boy
sank to the ground, and the desperate
father sent a second bullet from his
faithful repeating rifle crashing into
the bear's body, and with an almost
human cry of agony the savage brute
fell backward and rolled down the
hill. Ortega rushed to the boy and
found him uninjured. And then the
great hunter, who had killed more
grizzly bears than any man in South-
ern California, thanked God for the
miraculous preservation of his boy's
life, and for some time he was too
weak from the shock of his boy's
great peril to even lift his rifle. He
did not hunt for the wounded bear, for
the brush was very dense at the bot-
tom of the ravine, and he thought he
had had adventures sufficient for one
day.

The largest of the two bears would
weigh over 1,500 pounds. It was all
two strong horses could do to drag it
to a tree near by. The other, which
was quite poor, would weigh 700
pounds. Ortega took off their pelts
and the largest one measured eight
feet in length and seven and a half in
breadth. He has the skins at his cabin,
and they are both beautiful furs. Sen-
or Ortega certainly deserves great
credit for his nerve and courage in
that terribly trying time.

One winter, on the Sespe rancho,
Ortega captured 54 bears with the
losso.

Saving the Tree.

The N. Y. Tribune, in answer to an in-
quirer who asks if there is any way of
preventing the further spread of disease in
a handsome oak tree which is just begin-
ning to show signs of decay, says: "As
the decay is only beginning to show itself,
it will be practicable to remove the decayed
parts, which should be done completely as
far as tools will reach, and then covering
every portion of the exposed bark with
some convenient and durable waterproof
substitute for the bark, so as to prevent at
once the wood from drying, which stops
circulation; from cracking, which admits
moisture; and from the air, the oxygen of
which, aided by the moisture, is the
acting cause of the decay. Some paint or
varnish of nearly the same color as the
bark answers well on dry surfaces. French
foresters use gas-tar, first boiled to expel
water and thicken it, and it serves ex-
cellently, being both antiseptic and pro-
tective. Forsythe, in England, created a
widespread interest in his day by the
trees which were shown to visitors in the
Royal Gardens at Kew, in which large
hollows and hollows had been completely
healed over by such chirological treatment.
He used a mortar of clay and cowdung,
and that would not be so applicable in our
dry and vicissitudinal climate as there."

Dr. E. H. CHAPIN and Henry Ward Beecher
were once on board the same steamer
bound for Europe. The eminent orator fell
sick on the ocean, but finally rallied, in which
the vessel passed into an unusual calm, in re-
gular lifting up and letting down of the craft
on the recurrent waves. After some days of
this wearisome delay the two men met on the
deck in the early morning, and Mr. Beecher's
salutation was:

"Well, Chapin, we are still steadfast and
immovable."

"Yes," was the reply, "but we are always
a-bounding."

GENTLEMEN—Your Hop Bitters have been
of great value to me. I was laid up with
typhoid fever for two months and could get no
relief until I tried your Hop Bitters. They
gave me strength and health, and I cordially
recommend them to those suffering with debility or any one in
feeble health. I cordially recommend them.

J. C. STOETZEL, 633 Fulton St., Chicago, Ill.

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A SIMILAR CASE.

Jack, I know you have gone and done it. Yes, I know, most fellows will; Went and tried it once myself, sir.

How Jehiel Made \$50, and How the Young Vanderbilts Beat the Record.

Up in the White Mountains, a week or two ago, I heard of the latest achievement of the Vanderbilts. A party of the third generation of this interesting family (reckoning from the Commodore) was stopping at the Glen House.

Prof. Maspero's Mummy.

Egypt furnishes the last bit of railroad humor. Prof. Maspero had discovered the mummy of King Merenra. The Arabs had plundered his tomb, taking him out of his sarcophagus, and even robbed him of the numerous folds of cloth in which mummies are wrapped, and the body lay on the ground like a stick of dry wood.

Received.

MANUAL OF INSTRUCTION IN GEOGRAPHY. By Frank Peavy, Detroit.

This new addition to an already formidable array of text books, the author tells us in his preface, is the result of the method of teaching geography in his own school in this city, where he is known as a good instructor.

RECEPTION DAY.

E. L. Kellogg, 21 Park Place, New York.

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CATALOGUE OF HOLLAND BULBS.

Hiram Sibley & Co., Rochester, N. Y., and Chicago, Ill.

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LADY'S BOOK OF PRACTICAL INSTRUCTION IN ART EMBROIDERY.

By L. Maria Cheney, 256 Vinewood Avenue, Detroit.

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choice of colors, taste in blending, etc. there will be found full instructions for knitted and crocheted articles, such as mittens, infant's hoods and sacques, silk hose, and the like, and also recipes for stamping powder, transfer paper, etc.

REASON AND INFERENTIAL.—M. E. Dowling, Detroit, Mich.

The discussions between Robert Ingersoll and his opponents have, so far, been principally of a religious character, and hinging upon the divine or human origin of the Church.

DIAMOND DYES.

Dr. A. J. B. Jéger, Detroit, Mich.

These few pages of rhyme, "liltingly stringed together," enumerate in a pleasant fashion some of the advantages of our city, say kind things of our streets and parks, our fire department, board of health, churches, lawyers, and medical schools.

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"I was told the other day by a friend who happened to be at Windsor when General Grant and his son Jesse dined there with the Queen, and stayed all night at the castle, the following, which may be of interest to those who know young Grant and his ways.

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WHAT is called "Indian Summer" is known in Germany as the "Old Men's Summer," "St. Martin's Summer" in France; in other places, the "After Heat" and "Red Leaf." The Indians called it their "Fall Summer."

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demning, that she was induced to investigate the reasons of the opposition it excited, which led to an entire change of opinion. Miss Faithfull's first step toward the practical realization of her new theory, was the establishment of a printing office in which women were taught the business.

REASON AND INFERENTIAL.—M. E. Dowling, Detroit, Mich.

The discussions between Robert Ingersoll and his opponents have, so far, been principally of a religious character, and hinging upon the divine or human origin of the Church.

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Dr. A. J. B. Jéger, Detroit, Mich.

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and the joining of the cashmere and satin was concealed by a pinked ruche of the former. The sash was of the satin, tied in a large bow behind, and below the sash was a six inch box-pleating of cashmere, with the space between the pleats filled in with satin.

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Fresh Complexions. If you have humors and pimples, boils and eruptions, it is because the system needs toning and purifying. Nothing will give you such good health, smooth and fresh skin and vigorous feeling as Simmons Liver Regulator.

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the shelves. The lower shelves are for pots and kettles and the other heavy articles in use in the kitchen, the upper ones for crockery, glass and silverware. When arranged with good taste, these articles have a very attractive appearance behind the glass, which keeps the dust away from them.

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Taylor, Woolfenden & Co.,

165 & 167 Woodward Avenue DETROIT, MICH.

We offer an unusually Large and Complete Stock of

Cloaks, Dolmans, Sacques, Jackets, and Ulsters.

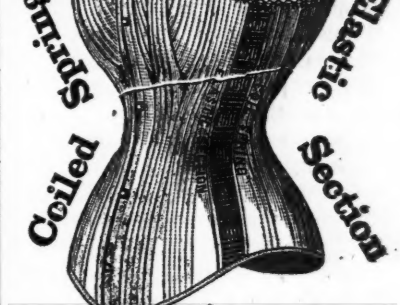
FUR & PLUSH-LINED CIRCULARS.

Special values in Seal Skin Garments. A full line of MISSES' GARMENTS.

Our stock is full and will be sold at very low prices.

TAYLOR, WOOLFENDEN & CO. 165 & 167 Woodward Ave. DETROIT, MICH.

BALL'S



CORSETS

Every Corset is warranted satisfactory to its wearer in every way, or the money will be refunded by the person from whom it was bought.

PRICES, by Mail, Postage Paid: Health Preserving, \$1.50. Self-Adjusting, \$1.50. Abdominal (extra heavy) \$2.00. Nursing, \$1.50. Health Preserving (see outfit) \$2.00. Foreign \$1.50. Supporting, \$1.50. For sale by leading Retail Dealers everywhere. CHICAGO CORSET CO., Chicago, Ill.

JAMES PYLE'S PEARLINE

THE BEST THING KNOWN

Washing and Bleaching

In Hard or Soft, Hot or Cold Water. SAVES LABOR, TIME and SOAP AMAZINGLY, and gives universal satisfaction. No family, rich or poor, should be without it.

DO

Not Fail to send for our FALL Price-List for 1882. Free to any address upon application. Contains descriptions of everything required for Personal or Family use, with over 2,200 illustrations. We sell all goods at wholesale prices, in quantities to suit the purchaser. The only institution in America who make this their special business. Address: MONTGOMERY WARD & CO., 297 and 299 Wabash Avenue, Chicago, Ill. 212-131

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FREE WITH EACH WHITE SEWING MACHINE. FREE WITH EACH WHITE SEWING MACHINE.

WHITE SEWING MACHINE. ADDRESS: WHITE SEWING MACHINE CO. CLEVELAND, O.

The Household.

EMILY FAITHFULL.

This English lady, now a visitor in our country, has attained considerable notoriety from her advanced views on the question of women's work and women's wages, and the persistence and success with which she has forced the issue upon the conservative English. She has helped more than any other, to enlarge the popular idea of what women can do. It is curious that an article which Miss Faithfull wrote, in which she took the customary conservative view of woman's place and what she should do, should have been the means of her own conversion to more liberal opinions. In reply to her article she received so many letters, questioning, correcting and con-

The British Grain Trade.

The Mark Lane Express, in its review of the British grain trade for the past week, says: "Floods further retarded wheat sowing. It appears inevitable that our wheat crop of 1923 will be materially reduced. There is little quotable change in native breadstuffs. Flour has been in less consumptive demand. Foreign breadstuffs are dull and lifeless. Red wheats on Monday were 6d to 1s cheaper. Stocks remain large. Flour is difficult to sell. Maize is in very small spot supply and fetches fancy prices, ranging from 96s to 98s. Barley is very quiet and prices are steadily maintained. Cargoes off coast are very quiet and prices unchanged. Of fresh arrivals five cargoes are sold, four are withdrawn, eight remain, including five of red winter. Cargoes to come forward are dull and rather weak."

Nitro-glycerine.

It has a sweet, aromatic, pungent taste, and possesses the very peculiar property of curing an extremely violent headache when placed in a small quantity upon the tongue or any other portion of the skin, particularly upon the wrist. It has long been employed by homoeopathic practitioners as a remedy in certain kinds of headaches. In those who work much with it the tendency to headache is generally overcome, though not always. It freezes at about 40 deg. Fahrenheit, becoming a white, half-crystallized mass, which must be melted by the application of water at a temperature of about 100 deg. Fahrenheit. If perfectly pure—that is if the washing has been so complete as to remove all traces of the acid—it can be kept for an indefinite period of time; and, while many cases of spontaneous decomposition have occurred in impure specimens, there has never been known such an instance where the proper care has been given to all the details of the manufacture. When pure, nitro-glycerine is not very sensitive to friction, or even to moderate percussion; if a small quantity be placed on an anvil and struck with a hammer, that portion which is touched explodes sharply, but so quickly as to drive away the other particles; if, however, it were even slightly confined, so that none could escape, it would all explode or detonate. It must be fired by a fuse containing fulminate of mercury (the compound used in percussion caps), not being either readily or certainly fired by gunpowder; the shock of the latter not being sufficiently quick or sharp to detonate the nitro-glycerine. It is highly probable that in this case, as in that of other high explosives, the vibrations set up by the fulminate (which is not stronger than gunpowder) are of just such a character as to find an answering chord, so to speak, in the explosive, so that the desired effect is produced. This would seem to be a correct theory, for it is not always the most powerful explosive which causes the explosion of another body. For instance, although nitro-glycerine is much more powerful than fulminate of mercury, yet 70 grains of it will not explode gunpowder, while 15 grains of the weaker fulminate will readily do so. The fuse generally used, then, for firing nitro-glycerine is composed of from 15 to 25 grains of fulminate, and this quantity is sufficient to detonate a large mass as well as a small one. If flame be applied to nitro-glycerine it will not explode, but will burn with comparative sluggishness. While frozen it is very difficult and uncertain of firing. If the material be perfectly pure it forms, upon detonation, a volume of gases nearly 1,200 times as great as that of the original liquid; these gases are also further expanded, by the heat developed, to a theoretical (though not practical) volume 10,000 times as great as that of the charge. Practically speaking, the forces exerted by gunpowder and nitro-glycerine are in the proportion of one to eight. —Popular Science Monthly.

The old idea that wheat turns to chesud under certain unfavorable conditions is still believed by many who ought to know better. In a late Rural New Yorker we find the following: "Mr. E. C. Reed, of Michigan, wrote some time ago stating that he had preserved a plant a part of which was chesud and a part wheat, and expressed his willingness to send it to us if desired. The plant was received in perfect order and a specimen better calculated to fasten the belief that wheat may change to chesud we have never seen. The stems and heads of each were pretty equally intermingled, and all seemed to proceed from the same root. The root was placed in water for 24 hours and the soil washed out. The chesud and wheat stems were then carefully placed together so that neither interfered with the other and by a gentle, steady pull the two intermingled roots were separated without breaking a fiber, showing the two plants to be perfectly distinct."

Sometimes genius with a taste for figures (or beer) has been hunting up statistics of the manufacture and sale of lager beer in this country. They are rather surprising. The people of the United States, we are assured, drink about 16,000,000 barrels of lager beer in the course of a year. It contains between four and five per cent only of alcohol. It yields between \$13,000,000 and \$14,000,000 of annual revenue to the Government. There are probably about 100,000 people engaged in the business, in one way or another, and \$153,000,000 (approximately) invested in it. About 5,000,000 barrels of malt liquor are made yearly in New York and vicinity. After reading this over we concluded it was no wonder hops were selling at \$1 per pound.

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CITY ITEMS.

Nothing but politics. We congratulate the elected and sympathize with the defeated. To-night a number of people in the State would wonder why they were ever fools enough to run for office.

The plans for the new Michigan Central passenger depot have been accepted, and work will be commenced on it at once.

Quite a number of candidates who thought they were specially called to fill offices in the State, will realize about this time that their opinion and that of the voters are considerably at variance.

The street sweeping machines have been tried on the streets of the city and have proved a great success. They do their work much better than it has ever been done by hand, and do a great deal more of it. However, they cannot vote.

C. R. MARLEY has commenced an action for trespass against Superintendent Conley and Captain Myler, laying damages at \$50,000. We think this is a great big bluff, and we hope the superintendent will not be deterred by it from enforcing the law as laid down by the statutes.

The first market at the new stock yard, held on Friday last, and everything worked very smoothly, all things considered. The only drawback now is hotel accommodations located conveniently to the yards, and this will be pushed to completion as soon as possible.

The pool between the Canada Southern and the Great Western Division of the Grand Trunk terminates January 1st, and about that time there is every promise of a fight between the two roads for eastern business. The Canada Southern is having new rolling stock added, and will run dining cars, two having been ordered. It is a good while since passenger rates from here east have been cut, and large numbers of people throughout the State are just laying low for a chance to pay their friends in the east a visit when they can get a cheap rate.

It has always been the custom of the hotel keepers at the stock yards to set out a lunch in the morning for their patrons on market days. As the usual hour for lunch came round last Friday, the drovers heaved a sigh of regret, took up their belts a couple of holes, set their teeth, and tried to forget the void in their stomachs that needed filling. Happily for them Mr. A. S. Drake had given the matter his attention during the week, and realizing just about how the boys would feel, had everything arranged and about 11 o'clock a wagon arrived at the yards with a magnificent lunch. It was a surprise to the drovers, but they soon recovered themselves and did ample justice to the lay out, and was quite sufficient to meet their wants and abundance to spare. After passing a unanimous vote of thanks to Mr. Drake for his kind note the boys went on and marked stock ten cents per hundred. On Saturday Mrs. Dorr sent up very nice lunch for the employees at the yards, and the reporter of the FARMER got his work in on it in good style. For our share we hereby return our sincere thanks to the lady, and hope she will do it some more.

IMPORTANT TO TRAVELERS.—Special inducements are offered you by the Burlington route. It will pay you to read their advertisement to be found elsewhere in this issue.

BURLINGTON, Vt., Jan. 25, 1922. I have used Downs' Elixir exclusively for myself and in my family for more or less years, and always kept it with me.

WARREN GIBBS, President Vermont Life Ins. Co.

FAIRHAVEN, Vt., Jan. 1, 1922. I prefer Downs' Elixir to any other cough remedy for children; simply on account of its tonic and expectorant qualities.

Respectfully, GEO. E. HARRIS.

The Howe Scales have all the latest improvements. It is true economy to buy the best. Borden, Selleck & Co., Agents, Chicago, Illinois.

COMMERCIAL.

DETROIT WHOLESALE MARKET. Flour.—Receipts for the week, 3,657 bbls, shipments 4,709 bbls. There is a very quiet market at present, and the volume of business shows a decline from previous weeks. There is also an unsettled feeling in the trade that hurls the market. The local sources of the demand has also been lighter than usual. We quote: Choice white wheat (country) 4 7/8 @ 5.00 Minnesota spring 7 00 @ 7.50 Minnesota winter 8 75 @ 9.00 Rye 4 00 @ 4.25

Wheat.—The market for the past week has been slowly working downward on cash wheat, and yesterday showed the same state of the trade. There is very little speculation, and even the demand for spot wheat was very light. All grades showed a decline, with the lower ones the weakest. The market closed dull and neglected. No. 1 white 97 1/2c; No. 2 do, 86c; No. 3 do, 78c; No. 2 red, 97c; No. 3 do, 90c. In futures closing prices were as follows: November, 86c; December, 86c; January, 86c; February, 81c. It looks as if the bottom had been reached, and that an increased demand would be a signal for somewhat higher prices.

Corn.—Very little is moving. The receipts are very light and the demand equally so. No. 2 is still quoted at 74 1/2c per bu. The local sources of the demand for spot wheat was very light. All grades showed a decline, with the lower ones the weakest. The market closed dull and neglected. No. 1 white 97 1/2c; No. 2 do, 86c; No. 3 do, 78c; No. 2 red, 97c; No. 3 do, 90c. In futures closing prices were as follows: November, 86c; December, 86c; January, 86c; February, 81c. It looks as if the bottom had been reached, and that an increased demand would be a signal for somewhat higher prices.

Barley.—Fair to good State samples prices range from \$1.00 @ 1.08 per cent of full weight. Market weak. Feed.—Demands are light, and offerings limited. The market is quiet at the following prices: bran, \$18 1/2c; coarse middling, \$14 @ 14 1/2c; corn and oats \$6 @ 6 1/2c; corn meal \$9.

Dried Fruit.—Quiet, but firm; for apples a demand prevails at 14c for common stock; evaporated fruit 14 @ 15c; peaches in stock, 13 @ 13 1/2c. E. evaporated fruit, 9 @ 9 1/2c; platted cherries 2 @ 2 1/2c. Rye.—Very little coming forward. The market is quiet, and quotations range from 65 @ 67c per bu. Butter.—Choice in small supply and firm at 28 @ 29c per lb, with the bulk of the receipts at 27 @ 28c. The medium and lower grades are dull and neglected.

Cheese.—Fine full cream stock is firm at 13 1/2 @ 14c, and second quality at 12 1/2 @ 13c per lb. Eggs.—Market bare of fresh stock. Quotations are 70c per doz. Lined eggs quoted at 70 @ 72c. Stock.—Invoices of pure quoted at 40 @ 42c; in stock it is held at 35 @ 36c. Onions.—Market quiet. Prices range about \$1 @ 1 10c per bu., and 40 @ 45c per bu. Beans.—Receipts report a firm market and an active inquiry for good stock. For pickled buyers are allowing \$1 15 @ 1 10c. Finely hand cut are quoted at \$1. Apples.—Quite a free inquiry is reported both

for shipping and local use. The market is firm at \$2 10 @ 2 15. Offerings of really choice fruit move readily at good prices. Clover Seed.—In light demand at \$5 50 @ \$5 75 per bu for November futures. Very little offered for export.

Quinces.—Few are being received. Quotations are \$1 25 per bu or \$4 per bu. Honey.—The market is well supplied, and prices range from 16 @ 18c for large packages, and 30c for small ones. Great Lakes.—Choice Cape Cod fruit is firm at \$12 per bu and \$1 per crate. State and western berries are dull at about \$3 per bushel.

Timothy Seed.—Is quiet; small orders are being filled at about \$2 10 @ 2 15 per bushel. Hops.—The market is very firm and advancing under reports from two points. The market holds about \$1 @ 1 10 per lb for New York, and the medium and lower grades at 90 @ 91c per lb, it would be useless to give lower quotations here. But brewers here are not willing to pay such prices, and there is nothing doing.

Potatoes.—The market is quiet, but receivers report no change in terms and conditions, the market holds about \$1 @ 1 10 per bu, although the arrivals possibly could not be readily placed at that rate. There ought to be a good export demand for Europe a little later.

Poultry.—A few chickens are in market at about 19 1/2c, but offerings are so light that the market is unsettled. Turkeys would be offered, but there is a demand for fine clean stock at \$5. To farmers' wagons retailers allow a little more. Provisions.—The market for all hog products is weak and lower. Hogs are also lower, and the fact that Germany has shut out American pork is affecting values. The cheaper prices of beef and mutton are also tending to less consumption of pork. Quotations in this market are as follows: Mess 28 00 @ 28 50 Family do 28 00 @ 28 50 Lard in tierces per lb 13 1/2 @ 13 1/2 Lard in kegs per lb 13 1/2 @ 13 1/2 Shoulders per lb 11 1/2 @ 11 1/2 Choice bacon per lb 12 1/2 @ 12 1/2 Tailow per lb 7 1/2 @ 7 1/2 Dried beef per lb 19 1/2 @ 19 1/2

LIVE STOCK MARKETS. At the Michigan Central Yards. Saturday, Nov. 4, 1922. The following were the receipts at these yards: Cattle, Sheep, Hogs. Ann Arbor 22 245 Albion 22 245 Brighton 15 140 Charlevoix 20 125 Colon 20 125 DeWitt 15 125 D. H. & M. 15 125 Dexter 22 245 Eastland 22 245 Ferrisville 22 245 Grand Lodge 22 245 Highland 22 245 Howell 22 245 Lansing 22 245 Leaning 22 245 Livingston 22 245 Mason 22 245 Metamora 22 245 Northville 22 245 Otter Lake 22 245 Okemos 22 245 P. M. 22 245 Ypsilanti 22 245 Given in 66 245 Total 492 2,028 382

The offerings of Michigan cattle at this yard numbered 492 head, against 511 last week. Of Western cattle there were only five loads, the smallest number which we have had from that section in several months. Shippers report the supply of western cattle in the St. Louis market as decreasing in numbers each week, and prices steadily advancing. If it had not been for the supply brought into the market from the west, during the past three months, prices would have been so high here that none but the wealthy could have afforded to use beef. As the run of cattle from the west is about over, higher prices may be looked for. The market opened up here on Friday with a rather light supply, and an active demand. The quality on the whole was poor and prices averaged a little higher than those of last week. Everything on sale changed hands. The following were the closing quotations:

Good to choice shipping steers 4 50 @ 5 00 Fair shipping steers 4 00 @ 4 50 Choice butchers' steers 3 75 @ 4 00 Good butchers' steers 3 50 @ 3 75 Coarse mixed butchers' stock 3 00 @ 3 40 Cows 2 50 @ 3 00 Bulls 2 00 @ 2 50 Hogs 10 00 @ 11 00 Sheep 12 00 @ 13 00

Chicago. Good to choice shipping steers 4 50 @ 5 00 Fair shipping steers 4 00 @ 4 50 Choice butchers' steers 3 75 @ 4 00 Good butchers' steers 3 50 @ 3 75 Coarse mixed butchers' stock 3 00 @ 3 40 Cows 2 50 @ 3 00 Bulls 2 00 @ 2 50 Hogs 10 00 @ 11 00 Sheep 12 00 @ 13 00

Extra Bees.—Graded steers weighing 1,000 to 1,250 lbs. and upwards, \$6 00 @ 6 75 Good Bees.—Well-fattened steers, weighing 1,000 to 1,500 lbs., 5 00 @ 5 60 Medium Grades.—Steers in fair flesh, weighing 1,000 to 1,250 lbs., 4 25 @ 5 00 Good Bees.—Well-fattened steers, weighing 900 to 1,000 lbs., 4 00 @ 4 75 Heifers Fair to choice, 4 00 @ 4 40 Texas and Choctaws, 3 00 @ 3 40 Mixed Butchers' Stock—Common 3 00 @ 3 40 Extra 3 00 @ 3 40 Canadian feeders, 4 25 @ 4 70 Stocking steers, weighing 1,000 to 1,250 lbs., 4 00 @ 4 40 Stock butchers, 3 00 @ 3 30 Butchers' stock, 2 50 @ 3 75 Veals—Fair to prime of 160 to 210 lbs. average, 7 50 @ 8 00

Receipts 27,000, against 25,800 the previous week. The receipts were liberal on Monday, and the market though not lower than the previous week, was weak. The market for Tuesday and Wednesday was lower and closed dull with good to choice selling at \$4 30 to \$4 50 for the best. There was no particular change on Tuesday, but on Wednesday the supply was largely in excess of the demand and the market was very quiet. There was a few early sales of fancy quality at 72 @ 80, with no demand except for the best grades. Pigs, 10 @ 12; sheep, 12 @ 13; calves, 10 @ 12; and strictly corn-fed, with the bulk of sales at \$7 @ 7 1/2.

Chicago. Receipts 42,639, against 44,840 last week. Shipments, 19,129. The market opened up on Monday with a heavy supply, but only a few lots of which could be classed as good shipments. Common and medium grades were in excessive supply and prices were lower. The market for the previous week. Extra steers were quiet, there being none in the market. Choice steers sold at \$4 60 @ 5; good, \$5 10 @ 5 60; medium, \$4 50 @ 4 85. Butcher's stock, poor to choice, \$2 75 @ 3 75. Scalawa, \$2 40 @ 2 55. Stock cattle, \$2 75 @ 3 75. There was no change in the market on Tuesday, but on Wednesday common cattle were largely in excess of the demand and prices in this class were 10 cents per hundred lower. On good shipments of steers there was an advance of 10 cents. On Friday and Saturday good cattle were in small supply and sold at steady prices. Common cattle were in excess of the demand and the market ruled weak. The following were the closing quotations:

Extra Bees.—Graded steers weighing 1,000 to 1,250 lbs. and upwards, \$6 00 @ 6 75 Good Bees.—Well-fattened steers, weighing 1,000 to 1,500 lbs., 5 00 @ 5 60 Medium Grades.—Steers in fair flesh, weighing 1,000 to 1,250 lbs., 4 25 @ 5 00 Good Bees.—Well-fattened steers, weighing 900 to 1,000 lbs., 4 00 @ 4 75 Heifers Fair to choice, 4 00 @ 4 40 Texas and Choctaws, 3 00 @ 3 40 Mixed Butchers' Stock—Common 3 00 @ 3 40 Extra 3 00 @ 3 40 Canadian feeders, 4 25 @ 4 70 Stocking steers, weighing 1,000 to 1,250 lbs., 4 00 @ 4 40 Stock butchers, 3 00 @ 3 30 Butchers' stock, 2 50 @ 3 75 Veals—Fair to prime of 160 to 210 lbs. average, 7 50 @ 8 00

Chicago. Receipts 104,557, against 78,927 last week. Shipments 14,912. The market opened on Monday with an active supply, but prices were higher during the early part of the day, but near the close fell back to the prices of the Saturday. Receipts were liberal, but prices were 7 1/2, and inferior to extra heavy at \$6 @ 6 25. Slips and culls sold at \$1 3/4 @ 1 50. On Tuesday the market ruled weak, with prices 10 cents lower. This was followed by another decline of 5 cents on Thursday and prices on some grades were 10 cents better. On Friday and Saturday the market for good to choice was 10 cents better. The closing prices were \$6 00 @ 7 1/2 for poor to choice light, and \$6 00 @ 7 1/2 for inferior to choice heavy. Slips and culls sold at \$1 3/4 @ 1 50.

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